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Tax Modernization Project (TAMP) in Bosnia and Herzegovina

Administered by Development Alternatives, Inc. as a Contractor for the US Agency for International Development

POTENTIAL REVENUE IMPACTS OF THE PROPOSED PERSONAL INCOME TAX LAW IN THE FEDERATION OF BOSNIA AND HERZEGOVINA

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June 2005

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1. INTRODUCTION

This study analyzes the potential revenue impacts of the proposed draft of the Personal Income Tax Law (*the PIT law*) in the Federation of Bosnia and Herzegovina (*FBiH*). Based on this study, we forecast that revenues from taxes on personal income will **increase by approximately 10%** with the introduction of the PIT law.

The PIT law will replace the *wage tax* and the following *cantonal citizen taxes*:

- Tax on Income from royalties, patents, and copyrights;
- Tax on Income from renting property and property rights;
- Tax on Profit of entrepreneurs;
- Tax on winnings from gambling;
- Tax on agricultural activities; and
- Tax on high income-earning individuals.

Currently, the tax rates and the tax base for each of these taxes vary from Canton to Canton. The PIT law simplifies the income tax system by substituting a single, Entity-level tax for about 60 different cantonal taxes.

The draft PIT law that was recently approved by the Government includes three marginal tax rates: 0% for taxable incomes up to 100 KM, 10% marginal rate on monthly taxable incomes over 100 KM but under 300 KM, and 15% for all income above 300 KM of monthly taxable income.¹ Each taxpayer will have a basic personal deduction of 100 KM per month (300 KM monthly for pensioners) and will be able to take personal deductions for dependents and, where applicable, invalidism.

The sections below describe the methodology used to forecast the possible effects of the new PIT law, the results of several scenarios analyzed, and the social and economic implications of the scenario that was chosen by the Government and that currently awaits Parliamentary approval.

2. METHODOLOGY

To simulate the impact of the proposed changes on tax revenues, the TAMP team developed a simple model. This model allows users to run different scenarios while evaluating options for the PIT reform.

The model presents a comparative analysis of tax revenues under the current system and under several alternative, or “possible”, systems. The possible systems not only provide for unified application of tax rates for all types of personal income, but also introduce a basic personal deduction and additional personal deductions. For all of the scenarios, we used the average

¹ Taxable income represents the difference between total income received and deductions recognized during a particular tax period.

deduction (basic personal plus personal) for a taxpayer who supports two family members (220 KM monthly).

Some scenarios in the model provide for an additional, lump-sum deduction of 50 KM per month for each taxpayer (*See* Table 3.). However, after consideration by the FBiH Government, this provision was removed from the PIT law draft.

The input data that we used in the model included the following:

- **Number of taxpayers.** Taxpayers in the model fall into three main categories: (i) those who pay tax on income from salaries and additional earnings; (ii) those who pay tax on income from independent activities, or entrepreneurs; and (iii) those who pay citizen taxes that are going to be replaced by the Personal Income Tax.

Data on the first category of taxpayers come from the Federal Bureau of Statistics. Data for the other two categories come from the Revenue Allocation System (*RAS*). All data are for 2003.

Based on these sources, roughly 380,000 taxpayers represent wage earners, 20,000 entrepreneurs paid the wage tax and citizen taxes on profit from independent activities, and 11,500 taxpayers paid other citizen taxes. In our model, we increased the numbers of taxpayers in these last two categories proportionally to line up with the tax revenues reported in RAS.

- **Monthly income**, separating: (i) income from salaries (from dependent and independent activities); (ii) profit of entrepreneurs (from independent activities); and (iii) income from other activities that are subject to citizen taxes.
- **Deductions.** Proposed basic personal deductions and personal deductions for dependents.
- **Marginal tax rates.** These include current marginal tax rates for the wage tax, tax on entrepreneurs' profit, and the average tax rate for other citizen taxes, as well as the proposed marginal tax rates for the Personal Income Tax.

3. SCENARIO ANALYSIS

After running several different scenarios, we narrowed our options to five optimal scenarios. The key differences between these scenarios are (i) the marginal tax rates and (ii) the income brackets to which each rate applies.

These scenarios are as follows (*See* Table 1.):

Table 1. Possible Scenarios

| Scenarios | Income Bracket 1 | | Income Bracket 2 | | Income Bracket 3 | | Average deductions (KM) |
|----------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|-------------------------|
| | Marginal Rate | Taxable Income (KM) | Marginal Rate | Taxable Income (KM) | Marginal rate | Taxable Income (KM) | |
| Scenario (a) | 10% | ≤ 300 | 15% | ≥ 301 | - | - | 220 |
| Scenario (b) | 10% | ≤ 400 | 15% | ≥ 401 | - | - | 220 |
| Scenario (c) | 10% | ≤ 500 | 15% | ≥ 501 | - | - | 220 |
| Scenario (d)* | 10% | - | - | - | - | - | 220 |
| Scenario (e) | 10% | ≤ 300 | 15% | 301-500 | 20% | ≥ 501 | 220 |

*Scenario (d) is a *flat* 10% tax on all personal income.

Table 2 shows the potential revenues that would be collected under the different scenarios presented in the Table 1. Scenario (e) yields the highest revenues, but this is because it imposes the 20% rate on the top marginal income bracket. Meanwhile, Scenario (a) yields slightly less revenue but still more than under the current system and under scenarios other than (e); furthermore, it imposes only a top marginal rate of 15%. The additional lump-sum deduction modeled in Scenarios (f) through (j) (*See* Table 3) was discarded because all scenarios, except one that imposes a 20% top marginal rate, yield less revenues than under the current system.

Table 2. Current System vs. Possible Scenarios

| Revenues (monthly): | Current system | Scenario(a) | Scenario(b) | Scenario(c) | Scenario(d) | Scenario(e) |
|-------------------------|--------------------|------------------------------|------------------------------|------------------------------|--------------------|--------------------|
| Wage Tax | 12,317,431 | 14,291,494 | 13,701,656 | 13,296,398 | 11,831,746 | 15,756,145 |
| Entrepreneur Tax | 592,137 | 325,372 | 312,470 | 303,461 | 236,855 | 391,978 |
| Citizen Taxes | 1,213,348 | 852,237 | 823,465 | 802,514 | 606,674 | 1,048,077 |
| Total – monthly | 14,122,917 | 15,469,104 | 14,837,591 | 14,402,372 | 12,675,275 | 17,196,201 |
| Total – annually | 169,475,000 | 185,629,245 | 178,051,089 | 172,828,468 | 152,103,303 | 206,354,410 |
| Marginal rates | 5 | 10 (up to 300 KM), 15 | 10 (up to 400 KM), 15 | 10 (up to 500 KM), 15 | 10 | 10, 15, 20 |

Table 3. Possible Scenarios (including the additional lump-sum deduction)

| Revenues (monthly): | Scenario(f) | Scenario(g) | Scenario(h) | Scenario(i) | Scenario(j) |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Wage Tax | 12,552,731 | 12,069,228 | 11,730,794 | 10,423,614 | 13,859,911 |
| Entrepreneur Tax | 325,372 | 312,470 | 303,461 | 236,855 | 391,978 |
| Citizen Taxes | 852,237 | 823,465 | 802,514 | 606,674 | 1,048,077 |
| Total – monthly | 13,730,341 | 13,205,164 | 12,836,768 | 11,267,143 | 15,299,966 |
| Total – annually | 164,764,087 | 158,461,964 | 154,041,222 | 135,205,716 | 183,599,593 |

| | | | | | |
|---------------------------|----------------------------------|----------------------------------|----------------------------------|-----------|-------------------|
| Marginal rates | 10 (up to 300 KM), 15 | 10 (up to 400 KM), 15 | 10 (up to 500 KM), 15 | 10 | 10, 15, 20 |
|---------------------------|----------------------------------|----------------------------------|----------------------------------|-----------|-------------------|

4. FINAL SCENARIO

After considering the above scenarios, the Government selected **Scenario (a)**—with marginal tax rates of 10% for taxable income below, and 15% for taxable income above, 300 KM per month.

A. General benefits

This Scenario helps the Government achieve both economic and social objectives. Specifically:

a) Economic objectives :

- Under Scenario (a), total revenues would be 9% higher (16 million KM annually) than under the current system.
- Marginal rates of 10% and 15% would be internationally competitive and much lower than in neighboring countries.
- A two-rate system would be simpler than a multiple-rate system, especially with respect to calculating tax liabilities. This would not only facilitate compliance by taxpayers and employers, but also would ease the burden on the Tax Administration.
- Entrepreneurs, including many small businesses in the FBiH, would benefit from a reduction of the tax rate on independent earnings from the current 25% to 10% and 15%.

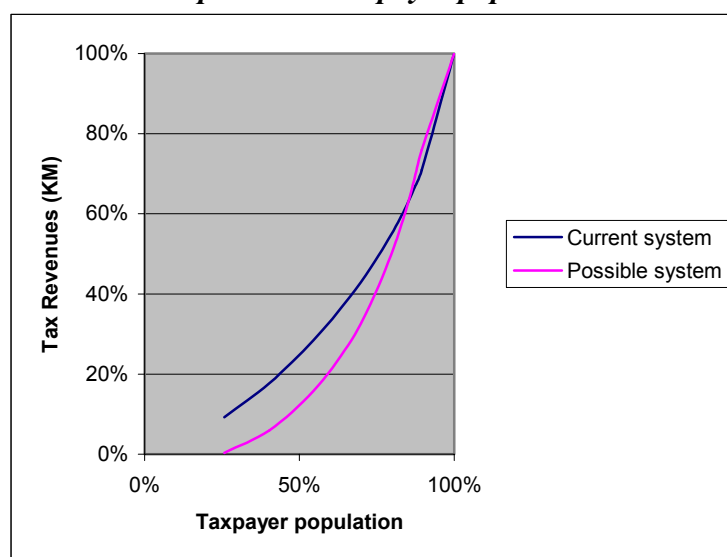
b) Social objectives

- Since the new VAT will impose a single 17% rate, a progressive-rate Personal Income Tax would help relieve some of the burden on the poorest individuals in the FBiH. According to proposed draft of the PIT law, the share of three lowest levels of income in total revenues decreases by 13% (*see* Table 4). It can be also seen from Figure 1 below that under the proposed system, almost 80% of the taxpayer population contributes less to total tax revenues than under the current system.
- While the new PIT law upholds the principle that all taxpayers should participate in the tax system, Scenario (a) would strike the best balance between the Government's revenue needs and the ability of each taxpayer to pay taxes.

Table 4. Final Scenario – Potential Revenues and Distribution of Tax Burden

| Revenues (monthly): | Current system | Scenario (a) | Difference |
|--|--------------------|------------------------------|----------------|
| Wage Tax | 12,317,431 | 14,291,494 | 16.03% |
| Entrepreneur Tax | 592,137 | 325,372 | -45.05% |
| Citizen Taxes | 1,213,348 | 852,237 | -29.76% |
| Total - Monthly | 14,122,917 | 15,469,104 | 9.53% |
| Total - Annually | 169,475,000 | 185,629,245 | 9.53% |
| Marginal rates | 5 | 10 (up to 300 KM), 15 | |
| Share of each income level in total public revenues | | | |
| Average income levels | Current system | Scenario (a) | Difference |
| 220 | 9.27% | 0.35% | -8.92% |
| 350 | 8.47% | 5.65% | -2.82% |
| 450 | 10.69% | 9.77% | -0.92% |
| 550 | 10.37% | 11.44% | 1.07% |
| 650 | 7.72% | 10.28% | 2.56% |
| 750 | 5.76% | 8.50% | 2.74% |
| 850 | 4.62% | 7.08% | 2.47% |
| 950 | 3.90% | 6.42% | 2.52% |
| 1,100 | 5.49% | 8.83% | 3.34% |
| 1,300 | 4.63% | 7.63% | 2.99% |
| 1,700 | 29.08% | 24.05% | -5.03% |
| | 100.00% | 100.00% | |

Figure 1. Relationship between taxpayer population and tax revenues



B. Benefits to wage earners

Since the wage tax currently accounts for roughly 90% of all revenues from taxes on personal income, we paid special attention to that source of revenues in our analysis.

Furthermore, we assumed that each taxpayer has two dependents and therefore takes the allowable deduction of 220 KM.

According to Table 5 below, if the new Law were enacted based on the current draft, 27% (105,755) of taxpayers who have salaries up to 300 KM per month would pay no wage tax at all. 46% (179,357 people) of taxpayers who have salaries from 301 KM to 600 KM would be taxed at the rate of 10%. Finally, 27% (102,269) of taxpayers would face rates of 10% on the first 300 KM of taxable income and 15% on income above 600 KM.

- a) **Economic objectives** are achieved through a 16% increase in total revenues from wage tax (2.1 million KM monthly or 25 million KM annually).
- b) **Social objectives are achieved by:**
 - Introducing of tax deductions that neutralize the increase in the tax rate from a flat 5% to a 10–15% rate structure.
 - Relieving nearly one out of every three taxpayers from paying tax on personal income (under the current system, all of them were responsible for paying tax on wages at the rate of 5%).

Table 5. Wage earners-Income Distribution

| Average income levels (KM monthly) | Number of employees | Share of specific group of employees in total number of employees |
|---------------------------------------|------------------------|--|
| 220 | 105,755 | 27% |
| 350 | 65,080 | 17% |
| 450 | 64,305 | 17% |
| 550 | 49,972 | 13% |
| 650 | 31,378 | 8% |
| 750 | 19,756 | 5% |
| 850 | 13,171 | 3% |
| 950 | 10,072 | 3% |
| 1,100 | 10,847 | 3% |
| 1,300 | 7,360 | 2% |
| 1,700 | 9,685 | 3% |
| Total | 387,381 | 100% |

C. Benefits to pensioners

Taxation of income from pensions is a new item introduced in the PIT law. The current draft proposes a marginal rate of 10% on pension income up to 300 KM per month, and 15% on income above that threshold. It also proposes a deduction of up to 300 KM for all pensioners. Table 6 shows that, based on this draft, 85% (251,841) of pensioners would be completely exempted from paying tax on pensions. 13% (38,994) of pensioners would be taxed at the 10% rate. Finally, a mere 2% (7,007) of pensioners would be taxed at 10% and 15%, i.e. those who have pensions from 600 KM to 728.2 KM (the highest pension amount).

The treatment of pensions in the draft PIT law also contributes to very important socio-economic objectives. Specifically, the 300 KM monthly deduction is 3 times higher than the basic personal deduction(100 KM) for all other taxpayers, which grants some relief to pensioners who may not have any other source of income.

Table 6. Impact of PIT on pensioners

| Number of taxpayers | Average monthly income (KM) | Deductions (KM) | Taxable base (KM) | Marginal tax rate | Monthly tax due per person (KM) | Total monthly generated revenue (KM) | Share of pension levels in total revenues |
|---------------------|-----------------------------|------------------|-------------------|-------------------|---------------------------------|--------------------------------------|---|
| 175,550 | 200.0 | 300 | 0.0 | 10% | 0.00 | 0 | 0% |
| 46,342 | 225.0 | 300 | 0.0 | 10% | 0.00 | 0 | 0% |
| 29,955 | 275.0 | 300 | 0.0 | 10% | 0.00 | 0 | 0% |
| 29,786 | 350.0 | 300 | 50.0 | 10% | 5.00 | 148,930 | 28% |
| 9,208 | 450.0 | 300 | 150.0 | 10% | 15.00 | 138,120 | 26% |
| 5,641 | 615.0 | 300 | 315.0 | 15% | 32.25 | 181,922 | 34% |
| 1,366 | 728.2 | 300 | 428.2 | 15% | 49.23 | 67,248 | 12% |
| 297,848 | | | | | 101.48 | 536,220 | 100.00 |

5. CONCLUDING REMARKS

The proposed PIT law is a step in the right direction for the FBiH tax system. As Table 2 illustrates, under the chosen Scenario, all other things equal, the PIT will increase revenues from taxes on personal income by approximately 10%.

The new law will greatly simplify income taxation by replacing more than 60 cantonal taxes with a single, Entity-level tax. Moreover, the 15% top marginal tax rate on personal income will be harmonized with the anticipated 15% rate on corporate income.

Considering the single-rate VAT that is set to be implemented next year, this tax also helps to address some of the country's social issues in a simple and fair way. Unlike under the current system, the new PIT will tax the level of income, or the "ability to pay," not the source of income or type of taxpayer. Furthermore, the 10–15% rate structure will impose a higher proportional tax burden on large income earners. At the same time, the standard and special deductions will help relieve some of the burden on the poorest individuals in the FBiH.

Aside from the above, it is also important to note that the new PIT law provides for a sophisticated system for withholding of tax on dependent income. When implemented, this system should greatly enhance compliance not only for income taxes but also for payment of contributions. In this respect, the establishment of a new withholding system will be an important first step in reforming the contributions system.

On a final note, the FBiH and the Republic of Srpska (**RS**) have worked in close coordination to ensure that their respective PIT laws are harmonized. Once these are enacted, Brcko District will introduce a new PIT law based on the model put forward by one of the two Entities. Therefore, the introduction of the PIT law in the FBiH will contribute to the creation of a “single economic space” in Bosnia and Herzegovina.